## **Abstract**

Joint classification functionality is provided for natural language call routing (NLCR) or other type of natural language processing (NLP) application implemented in a communication system switch or other processor-based device. The processor-based device is configured to identify a plurality of words contained within a given communication, and to process the plurality of words utilizing a joint classifier. The joint classifier determines at least one category for the plurality of words based on application of a combination of word information and word class information to the plurality of words. Words and word classes utilized to provide the respective word information and word class information for use in the joint classifier may be selected using information gain based term selection.

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